## West Virginia Department of Environmental Protection Division of Air Quality

Earl Ray Tomblin Governor Randy C. Huffman Cabinet Secretary

# Permit to Operate



Pursuant to **Title V**of the Clean Air Act

Issued to:

Dominion Transmission, Inc. Orma Compressor Station R30-01300002-2011

> John A. Benedict Dixectox

Permit Number: **R30-01300002-2011**Permittee: **Dominion Transmission, Inc.**Facility Name: **Orma Compressor Station**Permittee Mailing Address: 445 West Main Street
Clarksburg, WV 26301

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Orma, Calhoun County, West Virginia Facility Mailing Address: Crooked Run Road, Orma, WV 25268

Telephone Number: (304) 655-8989 Type of Business Entity: Corporation

Facility Description: Natural Gas Compressor and Dehydration Station

SIC Codes: 4922

UTM Coordinates: 492.68 km Easting • 4,288.86 km Northing • Zone 17

Permit Writer: Jesse Hanshaw, P.E.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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7.0.	Source-Specific Flare (F1) Compliance Assurance Monitoring (CAM) in accordance with 40 C.F.R 64.

#### 1.0 Emission Units and Active R13, R14, and R19 Permits

#### 1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EN01*	EN01	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	1965	660 HP	N/A
EN02*	EN02	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	1965	660 HP	N/A
EG01* (002-01)	EG01	4-Stroke, Rich-Burn Natural Gas- Fired Cummins 75GGHF Auxiliary Generator	2012	112.2 HP	N/A
DEHY01*	DEHY01	Dehydration unit still; Production Equipment, Inc.	1980	7 mmsef/day	Flare
DEHY*	DEHY	Dehydration unit still flare	<del>1980</del>	15.8 cfm	N/A
RBR01*	RBR01	Dehydration unit reboiler; Production Equipment, Inc.	1980	<del>0.50</del> MMBTU/hr	N/A
DEHY02	DEHY02	Cameron Model 210/350 Glycol Dehydrator Regeneration Still Column	<u>2012</u>	9 MMscf/day	Flare (F1)
RBR02	RBR02	Cameron Model 210/350 Glycol  Dehydration Reboiler	<u>2012</u>	0.567 MMBtu/hr	<u>None</u>
<u>F1</u>	<u>F1</u>	Dehydration Unit Flare	<u>2012</u>	4.0 MMBtu/hr	<u>n/a</u>
TK01	TK01	Horizontal, above ground tank containing triethylene glycol	1983	1000 gallon	N/A
TK02	TK02	Horizontal, above ground tank containing drip gas	1982	3,740 gallon	N/A
TK03	TK03	Vertical, above ground tank containing ethylene glycol	1990	2100 gallon	N/A
TK04	TK04	Vertical, above ground tank containing lube oil	1965	2730 gallon	N/A
TK05	TK05	Vertical, above ground tank containing lube oil	1965	4200 gallon	N/A
TK06	TK06	Horizontal, above ground tank containing used oil	2003	550 gallon	N/A
TK07	TK07	Vertical, above ground tank containing waste water	2003	500 gallon	N/A

<sup>\*</sup> This equipment burns or combusts pipeline quality natural gas only.

### 1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2945 <u>A</u>	October 17 September 11, 2012

#### 2.0 General Conditions

#### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

#### 2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance	
CAAA	Confidential Business Information	1101 0	Standards	
CEM	Continuous Emission Monitor	PM	Particulate Matter	
CEN	Certified Emission Statement	PM <sub>10</sub>	Particulate Matter less than	
C.F.R. or CFR		F 1V1 <sub>10</sub>		
C.F.R. or CFR	Code of Federal Regulations Carbon Monoxide	•	10μm in diameter	
• •	***************************************	pph	Pounds per Hour	
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million	
DAQ	Division of Air Quality	PSD	Prevention of Significant	
DEP	Department of Environmental		Deterioration	
	Protection	psi	Pounds per Square Inch	
FOIA	Freedom of Information Act	SIC	Standard Industrial	
HAP	Hazardous Air Pollutant		Classification	
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan	
HP	Horsepower	$SO_2$	Sulfur Dioxide	
lbs/hr or lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant	
LDAR	Leak Detection and Repair	TPY	Tons per Year	
m	Thousand	TRS	Total Reduced Sulfur	
MACT	Maximum Achievable Control	TSP	Total Suspended Particulate	
	Technology	USEPA	United States	
mm	Million		<b>Environmental Protection</b>	
mmBtu/hr	Million British Thermal Units per		Agency	
	Hour	UTM	Universal Transverse	
mmft³/hr <i>or</i>	Million Cubic Feet Burned per		Mercator	
mmcf/hr	Hour	VEE	Visual Emissions	
NA or N/A	Not Applicable		Evaluation	
NAAQS	National Ambient Air Quality	VOC	Volatile Organic	
	Standards		Compounds	
NESHAPS	National Emissions Standards for		r r	
	Hazardous Air Pollutants			
$NO_x$	Nitrogen Oxides			
-	<u>▼</u>			

#### 2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. [45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.

[45CSR§30-4.1.a.3.]

- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. [45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.

  [45CSR§30-6.3.c.]

#### 2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [45CSR§30-5.1.f.3.]

#### 2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
  - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

#### 2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

#### 2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

#### 2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments. [45CSR§30-6.5.b.]

#### 2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

#### 2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
  - a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

#### 2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:
  - a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
  - b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

#### [45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

#### 2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
  - a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

#### 2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

#### 2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
  - a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
  - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

#### 2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

#### 2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

#### 2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement. [45CSR§30-5.7.e.]

#### 2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act. [45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

#### 2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

#### 2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

#### 2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically

identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:
  - a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
  - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
  - c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

#### 2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

#### 2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

#### 2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

#### 2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
  - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
  - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

#### [45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. [45CSR§30-5.1.a.2.]

#### 3.0 Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.

  [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health Environmental Health require a copy of this notice to be sent to them.

[40 C.F.R. §61.145(b) and 45CSR34]

- 3.1.4. Odor. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
  [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.

  [45CSR\$11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

[40 C.F.R. 68]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

3.1.9. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.

[45CSR§10-4.1, Equipment ID-"description" (DEHY-"flare")]

3.1.10. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.

[45CSR§10-5.1, Equipment ID-"description" (DEHY-"flare")]

3.1.11. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

[45CSR§17-3.1; State Enforceable only]

#### 3.2. Monitoring Requirements

3.2.1. At a minimum of once per permit term, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of Sulfur. Proof of compliance with the 2000 ppm<sub>v</sub> SO<sub>2</sub> limit will be considered demonstrated if the gas chromatograph shows a total sulfur content of 2.762 grains/100 ft<sup>3</sup> or less. Records shall be maintained on site or at a reasonable available location stating the date and sulfur content of the gas sampled.

[45CSR§30-5.1.c, Equipment ID-"description" (DEHY-"flare")]

- 3.2.2. At a minimum of once per permit term, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of H<sub>2</sub>S. Proof of compliance with the 50 grains/100ft<sup>3</sup> limit will be considered demonstrated if the gas chromatograph shows a total H<sub>2</sub>S content of 0.216 grains/100 ft<sup>3</sup> or less. Records shall be maintained on site or at a reasonably available location stating the date and hydrogen sulfide content of the gas sampled.[45CSR§30-5.1.c, Equipment ID-"description" (DEHY-"flare")]
- 3.2.3. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

[45CSR13; R13-2945 (3.2.1.)]

#### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
  - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
  - d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
    - 1. The permit or rule evaluated, with the citation number and language.
    - 2. The result of the test for each permit or rule condition.
    - 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.3.2. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

[45CSR13; R13-2945 (4.3.1.)]

#### 3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A; 45CSR13, R13-2945 (4.4.1.)]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

#### 3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

#### If to the DAQ:

#### If to the US EPA:

Director Associate Director

WVDEP Office of Enforcement and Permits Review

Division of Air Quality (3AP12

601 57<sup>th</sup> Street SE U. S. Environmental Protection Agency

Charleston, WV 25304 Region III

1650 Arch Street

Phone: 304/926-0475 Philadelphia, PA 19103-2029

FAX: 304/926-0478

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3\_APD\_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.** 
  - a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

- 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
- 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
- 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
- 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

#### [45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. [45CSR§30-5.1.c.3.B.]
- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

  [45CSR§30-4.3.h.1.B.]

#### 3.6. Compliance Plan

3.6.1. N/A

#### 3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
  - a. 40 CFR 64-Compliance Assurance Monitoring. This is the second permit renewal for this facility. At the time of the first renewal, CAM was determined not to be applicable to the sources at this facility. Therefore, since there have been no changes to the emission units at the facility a CAM applicability determination is not required.

b. 40 C.F.R § 60.18. Flare is used only to control the odor. Even without the flare, the facility is not a major source of HAPs. Therefore, 40 C.F.R § 60.18 is not applicable.

#### 3.8. Emergency Operating Scenario

- 3.8.1. For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:
  - a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
  - b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
  - c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
  - d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
  - e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
    - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
    - ii. Identification of the engine(s) being temporarily replaced;
    - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
    - iv. Projected duration of the replacement engine(s); and
    - v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

### 4.0 Source-Specific Requirements for TEG Dehydration Unit (Reboiler RBR021, Dehydrator DEHY021, and Flare F1DEHY)

#### 4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1, Equipment ID (RBR024); [45CSR13, R13-2945 (4.1.4.d)]

4.1.2. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity: Factor F

A. Less than 15,000 lbs/hr 5.43

B. 15,000 lbs/hr or greater 2.72

Calculation for PM Emissions:

(5.43) x (33.515.8 acf/min) x (60 min/hr) x (0.0541 lb/cf) x (ton/2000 lb)

=0.29521392 lb/hr

[45CSR§6-4.1; 45CSR13, R13-2945 (4.1.5.f) Equipment ID (F1)-"description" (DEHY-"flare")]

4.1.3. Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.

[45CSR§6-4.3, Equipment ID (F1)-"description" (DEHY-"flare")]

- 4.1.4. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air. [45CSR§6-4.5, Equipment ID (F1)-"description" (DEHY-"flare")]
- 4.1.5. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

[45CSR§6-4.6, Equipment ID (F1)-"description" (DEHY-"flare")]

4.1.6. The permittee has defined the facility as a minor source of HAPs for existing source MACT applicability purposes. As a result, the TEG dehydration unit shall not emit HAPs to the atmosphere equaling or exceeding the major source thresholds of 10 tpy of any individual HAP or 25 tpy of aggregate HAPs. Therefore, the subject facility shall conduct monitoring, testing, and reporting as specified below (requirements 4.2.1 and 4.3.1) in order to provide adequate justification for maintaining minor source status. These requirements shall in no way restrict the permittee from conducting more frequent testing to quantify emissions increases.

[40CFR§63.10(b)(3); (Subpart HH), Equipment ID -"description" (DEHY021-"still")]

4.1.7. The following provisions of Part 63 Subpart HH National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities are applicable to the facility:

§ 63.760 Applicability and designation of affected source

The owner or operator of an affected area source that is not located in an Urban-1 county, as defined in §63.761, the construction or reconstruction of which commences on or after July 8, 2005, shall achieve compliance with the provisions of this subpart immediately upon initial startup or January 3, 2007, whichever date is later.

The owner or operator of an affected area source that is not located in an Urban 1 county, as defined in §63.761, the construction or reconstruction of which commences before July 8, 2005, shall achieve compliance with the provisions of this subpart no later than the dates specified in paragraphs (f)(5)(i) or (ii) of this section, except as provided for in §63.6(i) "Extension of Compliance with Emission Standards".

(f)(5)(ii) If the affected area source is not located within any UA plus offset and UC boundary, as defined in §63.761, the compliance date is January 5, 2009.

[40CFR§63.760(f)(6)(5)(ii), Equipment ID-"description" (DEHY021-"still")]

§ 63.764 General standards.

- (a) Table 2 of the Part 63 Subpart HH specifies the provisions of subpart A (General Provisions) of Part 63 that apply and those that do not apply to owners and operators of affected sources subject to this subpart.
- (b) All reports required under this subpart shall be sent to the Administrator at the appropriate address listed in §63.13. Reports may be submitted on electronic media.
- (d) Except as specified in paragraph (e)(1) of this requirement, the owner or operator of an affected source located at an existing or new area source of HAP emissions shall comply with the applicable standards specified in paragraph (d) of this section.
  - (2) Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in §63.761) shall comply with paragraphs (d)(2)(i) through (iii) of this requirement.
    - (i) Determine the optimum glycol circulation rate using the following equation:

$$L_{OPI} = 1.15 * 3.0 \frac{\text{gal TE G}}{16 \text{ H}_{2}\text{O}} * \left( \frac{F * (I - O)}{24 \text{ hr/day}} \right)$$

Where:

L<sub>OPT</sub>= Optimal circulation rate, gal/hr.

F = Gas flowrate (MMSCF/D).

I = Inlet water content (lb/MMSCF).

- O = Outlet water content (lb/MMSCF).
- 3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H<sub>2</sub>O).
- 1.15 = Adjustment factor included for a margin of safety.
- (ii) Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with paragraph (d)(2)(i) of this section. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with paragraph (d)(2)(i), the owner or operator must calculate an alternate circulation rate using GRI–GLYCalc<sup>TM</sup>, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with §63.775(c)(7).
- (iii) Maintain a record of the determination specified in paragraph (d)(2)(ii) in accordance with the requirements in  $\S63.774(f)$  and submit the Initial Notification in accordance with the requirements in  $\S63.775(c)(7)$ . If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with paragraph (d)(2)(i) or (ii) of this section and submit the information specified under  $\S63.775(c)(7)(ii)$  through (v).
- (e) Exemptions. (1) The owner or operator of an area source is exempt from the requirements of paragraph (e)(1) and (d) of this section if the criteria listed in paragraph (e)(1)(i) or (ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in §63.774(d)(1).
  - (ii) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in §63.772(b)(2) of this subpart.

#### [40CFR§63.764(a), (b), (d), (e); Equipment ID-"description" (DEHY021-"still")]

- 4.1.8. If the annual emissions of benzene from the dehydration unit for 2009 or any year thereafter equals or exceeds 0.90 megagram per year (1 tpy) as calculated per \$63.772(b)(2) (requirement 4.3.2), the permittee shall comply with the section d(2)(i) through (iii) of \$63.764 (requirement 4.1.7). [45CSR\$30-5.1.c, Equipment ID—"description" (DEHY021-"still")]
- 4.1.9. The maximum wet natural gas throughput to the Cameron Model 210/350 Glycol Dehydration Unit shall not exceed 9.0 MMscf/day or 3,285 MMscf/year.

  [45CSR13, R13-2945 (4.1.2); Equipment ID (DEHY02)]
- 4.1.10. The maximum emissions from the Glycol Dehydrator Regeneration Still Column (DEHY02), as emitted after combustion at the flare (F1), shall not exceed the limits given in the following table:

Glycol Dehydrator Regeneration Still Column Emission Limits<sup>(1)</sup>

<u>Pollutant</u>	<u>PPH</u>	<u>TPY</u>
<u>CO</u>	0.27	<u>1.17</u>
<u>NOx</u>	0.07	0.34
<u>VOC<sup>(1)</sup></u>	<u>1.78</u>	<u>7.82</u>

<u>Pollutant</u>	<u>PPH</u>	<u>TPY</u>
Benzene <sup>(1)</sup>	0.03	0.12
Ethylbenzene <sup>(1)</sup>	0.02	0.08
Hexane <sup>(1)</sup>	<u>0.01</u>	0.05
Toluene <sup>(1)</sup>	0.09	0.39
Xylene <sup>(1)</sup>	0.24	<u>1.04</u>
Total HAPs <sup>(1)</sup>	0.38	<u>1.68</u>

(1) Emissions based on GLYCalc Version 4.0 using wet gas throughputs as limited under 4.1.9.

[45CSR13, R13-2945 (4.1.3); Equipment ID (F1)]

- 4.1.11. The Reboiler, identified as RBR02, shall operate according to the following requirements:
  - a. The MDHI shall not exceed 0.567 mmBtu/hr and the unit shall only be fired by natural gas;
  - b. As the annual emission limits given in Table 4.1.11(c) are based on operating 8,760 hours/year, there is no limit on the annual hours of operation or fuel usage of the Reboiler;
  - c. The maximum emissions from the Reboiler shall not exceed the limits given in the following table;

Table 4.1.11(c): Reboiler Emission Limits

<u>Pollutant</u>	<u> PPH</u>	<u>TPY</u>
<u>CO</u>	<u>0.04</u>	<u>0.18</u>
NOx	<u>0.05</u>	0.22
<u>voc</u>	<u>0.04</u>	<u>0.17</u>

#### [45CSR13, R13-2945 (4.1.4); Equipment ID (RBR02)]

- 4.1.12. The Flare, identified as F1, shall operate according to the following requirements:
  - a. The maximum capacity of the flare shall not exceed 4.0 mmBtu/hr;
  - b. At all times the Glycol Dehydration Unit is processing natural gas, the flare shall be in operation;
  - c. The flare shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon combustion rate of 95.0%;
  - d. The permittee is not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2) until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 4.3.3., but the permittee is required to conduct a flare design evaluation in accordance with section 4.4.6. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of section §63.11(b) by complying with the compliance assessment testing requirements of section 4.3.3.
  - e. The flare shall meet all the applicable requirements of 40 CFR 63, Subpart A, Section 63.11(b) including the following:

(1) Flares shall be steam-assisted, air-assisted, or non-assisted.

#### [40 C.F.R. §63.11(b)(2)]

(2) Flares shall be operated at all times when emissions may be vented to them.

#### [40 C.F.R. §63.11(b)(3)]

(3) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22

#### [40 C.F.R. §63.11(b)(4)]

(4) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

[40 C.F.R. §63.11(b)(5)]

#### [45CSR13, R13-2945 (4.1.5); Equipment ID (F1)]

4.1.13. Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

#### [45CSR§13-5.11; 45CSR13, R13-2945 (4.1.6)]

#### **4.2.** Monitoring Requirements

4.2.1. In order to demonstrate compliance with the area source status, claimed within 4.1.6, as well as the 1 ton per year benzene exemption provided under 4.1.7 using GRI-GLYCalc V3 or higher, the dehydration system must be accurately defined by monitoring and recording actual operating parameters associated with the dehydration system. These parameters shall be measured periodically in order to define annual average values or if monitoring is not practical some parameters may be assigned default values as listed below. Periodically shall be interpreted as sufficient enough to reflect annual variation and therefore, this term is operating parameter and site dependeant.

The WV Division of Air Quality requires the following actual operating parameters be measured or assumed to equal the default values listed below in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GLYCalc emission modeling method:

- Natural Gas Flowrate:
  - o number of days operated per year,
  - o annual daily average (MMscf/day), and
  - maximum design capacity (MMscf/day)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type
- Flash tank temperature and pressure, if applicable
- Stripping Gas flow rate, if applicable

• Wet gas composition (upstream of the absorber – dehydration column) Sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V4.

The following operating parameter(s) may be assigned default values when using GRI-GLYCalc:

- Dry Gas water content at a point directly after exiting the dehydration column and before any additional separation points or assume pipeline quality at 7 lb H<sub>2</sub>O / MMscf.
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as
  established by GRI.
- Lean glycol circulation rate may be estimated using the recirculation ratio of 3 gal TEG / lb H<sub>2</sub>O removed.

#### [45CSR§30-5.1.c, Equipment ID—"description" (DEHY021-"still")]

4.2.2. Visual emission checks of each emission point specified shall be conducted monthly in accordance with 40 C.F.R. 60 Appendix A Method 22. If during these checks or at any other time visible emissions are observed at the flare emission point (DEHY), compliance shall be determined by conducting tests in accordance with Method 9 of 40 C.F.R. 60, Appendix A. Records shall be maintained on site stating the date and time of each visible emission check as well as any subsequent Method 9 quantification of opacity. Visible emission checks shall not be required during start ups, shut downs or malfunctions.

#### [45CSR§30-5.1.c; Equipment ID -"description" (DEHY-"flare")]

In order to demonstrate compliance with the flare opacity requirements of 4.1.12(e)(3), the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40CFR60 Appendix A Method 22. The permittee shall conduct this test within one (1) year of permit issuance or initial startup whichever is later. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR part 60, appendix A, Method 22 or from the lecture portion of 40 CFR part 60, appendix A, Method 9 certification course.

[45CSR13, R13-2945 (4.3.2); Equipment ID (F1)]

4.2.3. For the purposes of demonstrating compliance with the maximum wet gas throughput limit set forth in 4.1.9., the permittee shall monitor and maintain monthly and rolling twelve month records of the wet gas throughput of the Glycol Dehydration Unit.

[45CSR13, R13-2945 (4.2.3); Equipment ID (DEHY02)]

#### 4.3. Testing Requirements

4.3.1. Within the last 2 years of this permit term, prior to submitting the permit renewal application, the permittee shall determine the contents of the wet natural gas by sampling in accordance with GPA Method 2166 and analyzing according to extended GPA Method 2286 analysis as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.

[45CSR§30-5.1.c, Equipment ID—"description" (DEHY021-"still")]

- 4.3.2. The following testing and compliance provisions of Part 63 Subpart HH *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* are applicable to the facility:
  - § 63.772 Test methods, compliance procedures, and compliance demonstrations. (b) Determination of glycol dehydration unit flowrate or benzene emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate or benzene emissions to meet the criteria for an exemption from control requirements under §63.764(e)(1) (requirement 4.1.7).
    - (2) The determination of actual average benzene emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (b)(2)(i) or (b)(2)(ii) of this requirement. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.
    - (i) The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc<sup>TM</sup>, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc<sup>TM</sup> Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit.

Compliance with this monitoring and testing requirement shall be streamlined by demonstrating compliance with the monitoring specified within 4.2.1 and the testing provision of 4.3.1.

#### [40CFR§63.772 (b)(2)(i); Equipment ID-"description" (DEHY021-"still")]

- 4.3.3. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with section §63.11(b). This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18.

  [45CSR13, R13-2945 (4.3.3); Equipment ID (F1)]
- 4.3.4. In order to demonstrate compliance with 4.1.10, upon request of the Director, the permittee shall demonstrate compliance with the HAP emissions thresholds using GLYCalc Version 4.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.

  [45CSR13, R13-2945 (4.3.4); Equipment ID (DEHY02)]

**Recordkeeping Requirements** 

4.4.

- 4.4.1. For the purpose of demonstrating compliance with 4.1.3, & 4.1.12(e) and 4.2.2, the permittee shall maintain records of all monitoring data documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, and the results of the check(s). Should a visible emission observation be required to be performed per the requirements specified in 40 C.F.R. 60, Appendix A, Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

  [45CSR§30-5.1.c, Equipment ID—"description" (F1DEHY-"flare")]
- 4.4.2. The permittee shall calculate and maintain a record of actual uncontrolled emissions (in terms of individual and total HAP emissions per year) based on the daily annual average throughput processed by the dehydration unit. The annual emission estimates shall also incorporate the annual average operating

parameters required to be monitored by 4.2.1. The records of all associated monitoring (4.2.1) and testing (4.3.1) used to support and calculate the emission estimates shall also be maintained as part of this requirement. For any given year, if the testing requirement within 4.3.1 does not result in obtaining a wet gas analysis for that year, then the most recent wet gas analysis may be used.

Compliance with this recordkeeping requirement also streamlines compliance with the area source recordkeeping provisions of 40C.F.R. §63.774 (d)(1)(ii) for demonstrating compliance with the "less than 1 tpy benzene exemption".

[45CSR§30-5.1.c, 40C.F.R.§63.774(d)(1)(ii); Equipment ID-"description" (DEHY021-"still")]

4.4.3. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2945 (4.4.2)]

- 4.4.4. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
  - a. The equipment involved.
  - b. Steps taken to minimize emissions during the event.
  - c. The duration of the event.
  - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2945 (4.4.3)]

4.4.5. For the purpose of demonstrating compliance with section 4.1.12(e)(4), the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.

[45CSR13, R13-2945 (4.4.4); Equipment ID (F1)]

4.4.6. For the purpose of demonstrating compliance with section 4.1.12(d), the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.

[45CSR13, R13-2945 (4.4.5); Equipment ID (F1)]

4.4.7. For the purpose of demonstrating compliance with the requirements set forth in sections 4.1.12(e), the permittee shall maintain records of testing conducted in accordance with 3.3.1.

[45CSR13, R13-2945 (4.4.6); Equipment ID (F1)]

- 4.4.8. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 4.2. and testing requirements of 3.3.1.

  [45CSR13, R13-2945 (4.4.7)]
- 4.4.9. For the purpose of demonstrating compliance with section 4.1.12(e)(3), the permittee shall maintain records of the visible emission opacity tests conducted per Section 4.2.2.
   [45CSR13, R13-2945 (4.4.8); Equipment ID (F1)]

#### 4.5. Reporting Requirements

4.5.1. Any violation deviation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or method 22 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible emission determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR§30-5.1.e 45CSR13, R13-2945 (4.5.2), Equipment ID -"description" (F1DEHY-"flare")]

4.5.2. The permittee shall submit by March 31<sup>st</sup> of the following year, an emission summary for the dehydration unit (DEHY01), which incorporates the wet gas testing results required by 4.3.1. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 4.2.1. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall also incorporate a copy of the lab analysis obtained from the wet gas testing as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point, which is referenced within 40 C.F.R 63, subpart HH as the point where the gas enters into a natural gas transmission and/or storage pipeline. This report shall be signed by a responsible official upon submittal.

[45CSR§30-5.1, Equipment ID—"description" (DEHY021-"still")]

- 4.5.3. If permittee is required by the Director to demonstrate compliance with section 4.3.3, then the permittee shall submit a testing protocol at least thirty (30) days prior to testing and shall submit a notification of the testing date at least fifteen (15) days prior to testing. The permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.

  [45CSR13, R13-2945 (4.5.1); Equipment ID (F1)]
- 4.5.4. Any deviation(s) from the flare design and operation criteria in Section 4.4.6 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of discovery of such deviation.

[45CSR13, R13-2945 (4.5.3); Equipment ID (F1)]

#### 5.0 Reciprocating Internal Combustion Engine GACT Requirements (Engines EN01 and EN02)

#### 5.1 Limitations and Standards

5.1.1. As stated in 40 C.F.R. §§63.6603, the permittee must comply with the following requirements from Table 2d for existing stationary RICE located at area sources of HAP emissions:

For each	The permittee must meet the following requirements, except during periods of startup
Non-emergency,	Change oil and filter every 4,320 hours of operation or annually, whichever comes first; 1
non-black start 2SLB stationary	Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and
RICE	Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

<sup>&</sup>lt;sup>1</sup>Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

#### [40 C.F.R. 63.6603(a), and Table 2d]

5.1.2. The permittee must comply with the applicable operating limitations in this section no later than October 19, 2013.

[40 C.F.R. § 63.6595(a)]

- 5.1.3. The permittee shall comply with the following requirements:
  - a. The permittee must be in compliance with the operating limitations in this subpart that apply to the permittee at all times.
  - b. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if required levels have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

#### [40 C.F.R. § 63.6605]

- 5.1.4. The permittee shall demonstrate continuous compliance by doing the following:
  - a. The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Table 2d to 40 C.F.R. 63, Subpart ZZZZ that apply to the permittee according to methods specified in Table 6 to 40 C.F.R. 63, Subpart ZZZZ.

Table 6 states that for work or management practices the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent

practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- b. The permittee must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to 40 C.F.R. 63, Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650.
- c. The permittee must also report each instance in which the applicable requirements in Table 8 to 40 C.F.R. 63, Subpart ZZZZ were not met.

#### [40 C.F.R. § 63.6640(a), (b), and (e), Equipment ID (EN01 & EN02)]

5.1.5. The permittee shall comply with all General Provisions which apply according to Table 8 to 40 C.F.R., Part 63, Subpart ZZZZ.

[40 C.F.R. § 63.6665]

#### **5.2.** Monitoring Requirements

- 5.2.1. This facility is subject to the following requirements:
  - a. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: [40 C.F.R. §63.6625(e)(5)]
  - b. If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. [40 C.F.R. §63.6625(h)]
  - If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. §63.6625(j)]

[40 C.F.R. § 63.6625]

#### **5.3.** Testing Requirements

5.3.1. Reserved

#### 5.4. Recordkeeping Requirements

- 5.4.1. If the permittee must comply with the emission and operating limitations, the permittee must keep the following records:
  - a. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv).
  - b. Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.
  - c. Records of performance tests and performance evaluations as required in 40 CFR §63.10(b)(2)(viii).
  - Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR §63.6655(a)]
- 5.4.2. The permittee must keep records of the maintenance conducted on each stationary RICE in order to demonstrate that the permittee operated and maintained each stationary RICE and after-treatment control device (if any) according to the permittee's own maintenance plan.

  [40 CFR §63.6655(e)]
- 5.4.3. The permittee shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applied.[40 CFR §63.6655(d)]

#### 5.5. Reporting Requirements

5.5.1. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 CFR §63.6650(f)]

For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting

period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

[40 CFR §63.6650(d)]

#### **5.6.** Compliance Plan

5.6.1 N/A

#### 6.0 Source-Specific Requirements [Emergency generator; EG01(002-01)]

#### 6.1. Limitations and Standards

6.1.1. The emergency generator, identified as EG01, shall be a 112.2 horsepower, 4-Stroke Rich-Burn Natural Gas-Fired Cummins 75GGHF Auxiliary Generator and shall not operate in excess of 500 hours per year based on a rolling twelve month total.

[45CSR13, R13-2945 (4.1.1.a)]

6.1.2. The maximum emissions from the <u>Emergency</u> Auxiliary Generator shall not exceed the limits given in the following table:

Table 6.1.2.: Emergency Generator Emission Limits

Pollutant	PPH <sup>(1)</sup> lb/hr	TPY <sup>(2)</sup> ton/year
СО	11.47	2.87
NO <sub>x</sub>	1.53	0.38
VOC	0.30	0.07

(1) PPH emissions based on specific model of engine and engine size. (2) TPY emissions based on 500 hours operation/year.

[45CSR13, R13-2945 (4.1.1.b2.)]

6.1.3. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 [to Subpart JJJJ] for their stationary SI ICE.

Table 1 to Subpart JJJJ of Part 60— $NO_X$ , CO, and VOC Emission Standards for Stationary Emergency Engines >25 HP

			Emission sta	ındards
Engine type	Maximum	Manufacture Manufacture	g/HP-ł	ır
Engine type and fuel	engine power	date	$NO_X$	CO
Emergency	25 <hp<130< td=""><td>1/1/2009</td><td>°10</td><td>387</td></hp<130<>	1/1/2009	°10	387

<sup>&</sup>lt;sup>c</sup>The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO<sub>X</sub> + HC.

[45CSR16; 40 C.F.R. §60.4233(e), Table 1 to 40 C.F.R. 60 Subpart JJJJ; 45CSR13, R13-2945 (4.1.1.c3.)]

6.1.4. The emergency generator shall meet the definition of "Emergency stationary internal combustion engine" as given under 40 C.F.R. §60.4248.

[45CSR16; 40 C.F.R. §60.4248; 45CSR13, R13-2945 (4.1.1.d4.)]

6.1.5. The permittee shall comply with the applicable General Provisions in 40 C.F.R. §§60.1 through 60.19 as specified in Table 3 to 40 C.F.R. 60 Subpart JJJJ.

[45CSR16; 40 C.F.R. §60.4246]

- 6.1.6. 40 C.F.R. § 63.6590 What parts of my plant does this subpart cover? (note the following section numbers match those of 40 C.F.R. §63.6590)
  - (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
  - (1) A new or reconstructed stationary RICE located at an area source;

#### [40 C.F.R. §63.6590]

Note: The engine is a new stationary RICE subject to 40 CFR part 60 subpart JJJJ. Compliance with 40 CFR part 60 subpart JJJJ shall show compliance with 40 CFR part 63 Subpart ZZZZ.

#### **6.2.** Monitoring Requirements

6.2.1. For the purposes of demonstrating compliance with the maximum usage limits set forth in 6.1.1., the permittee shall maintain monthly and rolling twelve month records of the hours of operation of the emergency generator.

[45CSR13, R13-2945 (4.2.1.)]

- 6.2.2. (a) You must meet one of the requirements specified in (a)(1) and (2) of this section.
  - (1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.
  - (2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of §60.4243, as appropriate.
    - (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.
  - (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in \$60.4233(d) or (e), you must demonstrate compliance according to the method specified in paragraph (b)(1) of this section.

- (1) Purchasing an engine certified according to procedures specified 40 C.F.R.60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
- (d) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.
- (f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[45CSR16; 40 CFR §60.4243; 45CSR13, R13-2945 (4.2.2.)]

- 6.2.3. The permittee shall comply with all applicable monitoring, compliance demonstration and record keeping requirements as given under 40 CFR 60, Subpart JJJJ. [45CSR13, R13-2945 (4.2.3.)]
- 6.2.34. If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

[45CSR16; 40 C.F.R. § 60.4237(c)]

#### **6.3.** Testing Requirements

6.3.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations under Table 6.1.2. established in this permit and/or applicable regulations.

[45CSR13, R13-2945 (4.3.1.)

6.3.2. The permittee shall comply with all applicable testing requirements as given under 40 CFR 60, Subpart JJJJ.

[45CSR13, R13-2945 (4.3.52.)

#### 6.4. Recordkeeping Requirements

6.4.1. The permittee shall comply with all applicable record-keeping requirements as given under 40 CFR 60, Subpart JJJJ.

[45CSR13, R13-2945 (4.4.94.)

- 6.4.2. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.
  - (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
    - (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
    - (2) Maintenance conducted on the engine.
    - (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
    - (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 C.F.R. §60.4243(a)(2), documentation that the engine meets the emission standards.

[45CSR16; 40 C.F.R. § 60.4245(a)]

#### 6.5. Reporting Requirements

6.5.1. The permittee shall comply with all applicable reporting requirements as given under 40 CFR 60, Subpart JJJJ.

[45CSR13, R13-2945 (4.5.<u>4</u>1.)]

#### 6.6. Compliance Plan

N/A

### 7.0. Source-Specific Flare (F1) Compliance Assurance Monitoring (CAM) in accordance with 40 C.F.R 64

#### 7.1. Limitations and Standards

7.1.1. In order to demonstrate compliance with the VOC, Xylene and total HAPs limitations defined within permit condition 4.1.10, the flare shall comply with the CAM requirements defined within this section.

[40 C.F.R. 64]

#### 7.2. Monitoring Requirements

- 7.2.1. The permittee shall implement a CAM program for the flare based on the following performance indicators:
  - a. The flare shall be operated with each of its pilot lights operating at all times when emissions could be routed to the control device. The permittee shall continuously monitor each pilot for the presence of a pilot flame by using a thermocouple or any other equivalent device to detect the presence of a flame. This monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications. The flame shall be monitored continuously using a computerized data acquisition, feedback, and control system to ensure the flare operates at all times the dehydration is in operation.
  - b. The flare shall be designed for and operated with no visible emissions except as allowed in Condition
     7.2.3. No visible emission in this context shall mean, visible emissions for no more than 5 minutes within any consecutive 2 hour period using Method 22.

[40 C.F.R. §64.6(c), 45CSR§30-5.1.c]

7.2.2. **Proper Maintenance.** The permittee shall maintain monitoring at all times, including maintaining necessary spare parts for routine repairs of the monitoring equipment.

[45CSR§30-5.1.c.; 40 C.F.R. §64.7(b)]

- 7.2.3. **Response to Excursions or Exceedances**. In accordance with the operation of the flare an excursion shall be defined as any period in which any of the flare's pilot lights are not detected. Additionally, an excursion shall also be recorded if visible emissions are detected for greater than 5 minutes within any consecutive 2 hour period, that are not related to a documented malfunction, startup, or shutdown condition.
  - a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or below the applicable emission limitation or standard, as applicable.
  - b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. §§64.6(c)(2) and 64.7(d); 45CSR§30-5.1.c.]

7.2.4. Documentation of Need for Improved Monitoring - After approval of monitoring under 40 C.F.R. Part 64, If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the result of compliance or performance testing/design evaluation document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 C.F.R. §64.7(e); 45CSR§30-5.1.c.]

#### 7.2.5. Quality Improvement Plan (QIP)

- a. Based on the results of a determination made under permit condition 7.2.3.b, 7.2.5.b, or 7.2.5.c the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, it shall be developed, implemented, and modified as required according to 40 C.F.R. §§64.8(b) through (e). Refer to permit condition 7.5.1(b)(iii) for the reporting required when a QIP is implemented.
- b. If five (5) percent or greater of the time, is documented with no pilot light available during a calendar quarter, the permittee shall develop and implement a QIP. The Director may waive this QIP requirement upon a demonstration that the cause(s) of the excursions have been corrected.
- c. If during any time period the permittee observes a visible emission (VE) excursion, which shall be defined as, the presence of visible emissions exceeding 5 minutes within any 2 hour time period the permittee shall develop and implement a QIP. Additionally, the observed emissions should not be counted towards the total if related to a pilot light excursion or during a startup, shutdown or malfunction (SSM) event.

In developing a QIP due to visible emission excursions, the source shall identify through process knowledge and flow monitoring data the type and amount of waste gas going to the flare at the time of each VE excursion.

#### [40 C.F.R. §§ 64.8 and 64.7(d); 45CSR§30-5.1.c.]

7.2.6. Continued Operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 C.F.R. §64.7(c); 45CSR§30-5.1.c.]

#### 7.3. Testing Requirements

N/A

#### 7.4. Recordkeeping Requirements

- 7.4.1. As part of the CAM plan the permittee shall keep an up-to-date, readily-accessible record of the following information:
  - a. All visible emission readings.
  - b. Continuous records of the pilot flame heat-sensing monitoring, and
  - c. Records of all periods of operations during which the pilot flame is absent.
  - d. Records of all periodic testing checks, calibration, and maintenance per manufacturer's specifications.

[40 C.F.R.§64.9(b), 45CSR§30-5.1.c]

#### 7.4.2. General Recordkeeping Requirements for 40 C.F.R. Part 64 (CAM)

The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.4.1. and 3.4.2. The permittee shall maintain records of monitoring data, monitoring performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 (condition 7.2.5.) and any activities maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

[40 C.F.R. §64.9(b); 45CSR§30-5.1.c.]

#### 7.5. Reporting Requirements

#### 7.5.1. General Reporting Requirements for 40 C.F.R. Part 64 (CAM)

- a. On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit monitoring reports to the DAQ in accordance with permit condition 3.5.6.
- <u>b.</u> A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:
  - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable) provided in accordance with 40 C.F.R. Part 75; and
  - iii. A description of the actions taken to implement QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a); 45CSR§30-5.1.c.]